



1141027 - R8 SDMS

November 23, 2009

Sent via email

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for October 2009 activities - Hecla Mining Company Apex Site
(EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the October 2009 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader".

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)



November 23, 2009

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
6060 West 3650 North
Ivins, Utah 84738

John Krause
Bureau of Indian Affairs
400 North 5th Street, Floor 12
Phoenix, AZ 85004

Kelly Youngbear
BIA Southern Paiute Agency
P.O. Box 720
St. George, UT 84771

RE: Progress report for October 2009 activities - Hecla Mining Company Apex Site
(EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the October 2009 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul L. Glader", with a long, sweeping horizontal line extending to the right.

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)



November 23, 2009

MEMORANDUM TO: Apex File

COPIES TO: distribution

FROM: Paul Glader

SUBJECT: Progress Report No. 66 for period ending October 31, 2009; Pond 2 Final Closure - Apex Site, Washington County, Utah

Summary

The monthly visual inspection, per the long term monitoring plan, was conducted on October 24. No unusual conditions were noted.

Geotechnical Monitoring

Based on the data showing that the facility has experienced consistently low settlement rates over the past three years, Hecla will continue to monitor the facility, however with survey data being collected on an annual basis.

The settlement monitors were surveyed on August 17, 2009. No appreciable movement was noted. MEI prepared a Surface Monument Survey Data Review. Based on surface monitoring survey data collected from January 2006 through August 2009:

- Overall settlement of the reclaimed impoundment top surface continues to be very minor
- Settlement rates continue to slightly decrease

Work Planned for Next Period

Visual inspection of site

Cost and Schedule

Committed costs in October 2009 were \$431. Total project to date committed cost is approximately \$1,475,000.

Supplemental Attachments

October 2009 site inspection report

August 17 monument monitoring survey

MEI Surface Monument Survey Data Review

October 2009 cost report

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: <u>10-24-09</u>			
Inspector: <u>D. Truesdell</u>			
Cover System Component	Potential Problem	Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues	NA	NA
Cover System (outslopes, top, rock)	Subsidence	Minor: ponding < 1" some gullying / erosion	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
		Significant: see Table 2	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Embankment Slope Stability	excessive movement or surface cracks > than 1"	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Gullying	on top	depth > 1" Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		at embankment crest or on outslope	depth > 2" Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		w/in normal flow channel in diversion channel	no gullying allowed Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		w/in diversions at toe of impoundment outslope	no gullying allowed Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
		in diversion channel at any other location	NA NA
	Erosion Protection Stability	rock subsiding or missing	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	Seepage	no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Runoff Control System	Diversion Channel	rock in place, channel not moving, fence stable	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Diversion Swales	rock in place, no silting in or head cutting	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
	Excessive silt build up at fence lines in diversion channel	allowed if not effecting cover system	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

**Hecia Mining Company - Long-Term Maintenance and Monitoring Plan
Form 2 of 4 - Site Perimeter**

Inspection Date: <u>10-24-09</u>	
Inspector: <u>D. Tramm</u>	
Visible Outlying Areas	
Observed Condition:	<u>Normal</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	<u>Gate + Fence in good Repair</u>
Observed Damage:	<u>None</u>
Potential Corrective Actions:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	<u>No Change</u>
Observed Damage:	<u>None</u>
May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>	

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: <u>10-24-09</u>			
Inspector: <u>D. Turner</u>			
Outslopes			
Observed Performance:	Rock Cover Subsidence:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Slope Movement (failure):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Gully Development:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Observable Leachate (colored):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Excessive Siltation (at slope toe):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Top (top surface soils)			
Observed Performance:	Cracking (>1" width):	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Settlement / Evidence of Ponding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Erosion / Gullyng:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			
Erosion Protection Layer (rock)			
Observed Performance:	Rock Staying in Place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Rock Subsiding:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Missing Rock:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>NONE</u>			
Potential Corrective Actions: <u>NONE</u>			

Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecia Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: <u>10-24-08</u>			
Inspector: <u>D. [signature]</u>			
Diversion Channel			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Normal Flow Channel in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Encroaching on Site Fencing:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			
Diversion Swales			
Observed Performance:	Erosion Protection in place:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Flow Channel Silt In:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
	Head Cutting:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	May require repair: Yes <input type="checkbox"/> * No <input checked="" type="checkbox"/>
Observed Damage: <u>None</u>			
Potential Corrective Actions: <u>None</u>			

* Mark all areas of concern or requiring repairs on attached site map.



ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

HECLA MINING SITE MONUMENT MONITORING (AS-BUILD DATE: AUGUST 17, 2009)

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.42	10130.68	3685.54	Top alum. cap
#2	10146.06	10277.45	3685.70	Top alum. cap
#3	10092.40	10417.32	3685.86	Top alum. cap
#4	9966.72	10489.51	3685.65	Top alum. cap
#5	9865.73	10437.08	3686.41	Top alum. cap
#6	9807.90	10293.13	3686.27	Top alum. cap
#7	10013.39	10283.62	3686.86	Top alum. cap
#8	9989.98	10130.33	3685.62	Top alum. cap
#9	9862.85	10149.31	3685.59	Top alum. cap
#10	10006.08	9997.80	3678.03	Top alum. cap
#11	9964.21	10309.05	3684.53	Top alum. cap

MONSTER ENGINEERING INC
ENGINEERING • DESIGN • MANAGEMENT

3031 banner spring ranch road
laporte, colorado 80535

(970) 221-7177
fax (970) 224-0161

email monster@peachpeak.com



MEMORANDUM

TO: Paul Glader (Hecla Mining Company)
FROM: Doug Gibbs (Monster Engineering Inc.)
DATE: 10/19/09
SUBJECT: **Surface Monument Survey Data Review – Apex Site**

Surface monument surveying has been conducted quarterly at the Apex Site by Alpha Engineering since January of 2006. Based on data collected through August 2009:

- Overall settlement of the reclaimed impoundment top surface continues to be very minor.
- Settlement rates continue to slightly decrease.

All data shown in the following table and graphs has been corrected based on maintaining a zero elevation change at Monument #10 (at the gate). This monument (#10) is the baseline from which all other monuments are surveyed, is located outside of the impoundment, and should show no movement between monitoring periods. Total and annual survey monument elevation changes since installation are shown in the following table.

Monument	Total Elevation Change Jan. 4, 2006 to August 17, 2009		Annual Elevation Change July 8, 2008 to August 17, 2009	
	(feet)	(inches)	(feet)	(inches)
1	-0.18	-2.2	-0.07	-0.8
2	-0.13	-1.6	-0.04	-0.5
3	-0.32	-3.8	-0.12	-1.4
4	-0.10	-1.2	-0.06	-0.7
5	-0.09	-1.1	-0.04	-0.5
6	-0.05	-0.6	-0.02	-0.2
7	-0.36	-4.3	-0.09	-1.1
8	-0.23	-2.8	-0.08	-1.0
9	-0.12	-1.4	-0.03	-0.4
10 (baseline @ gate)	NA	NA	NA	NA
11 / Main (impoundment center)	-0.09	-1.1	-0.04	-0.5
Average	-0.17	-2.0	-0.06	-0.7

NA – baseline monument - data corrected to show no movement

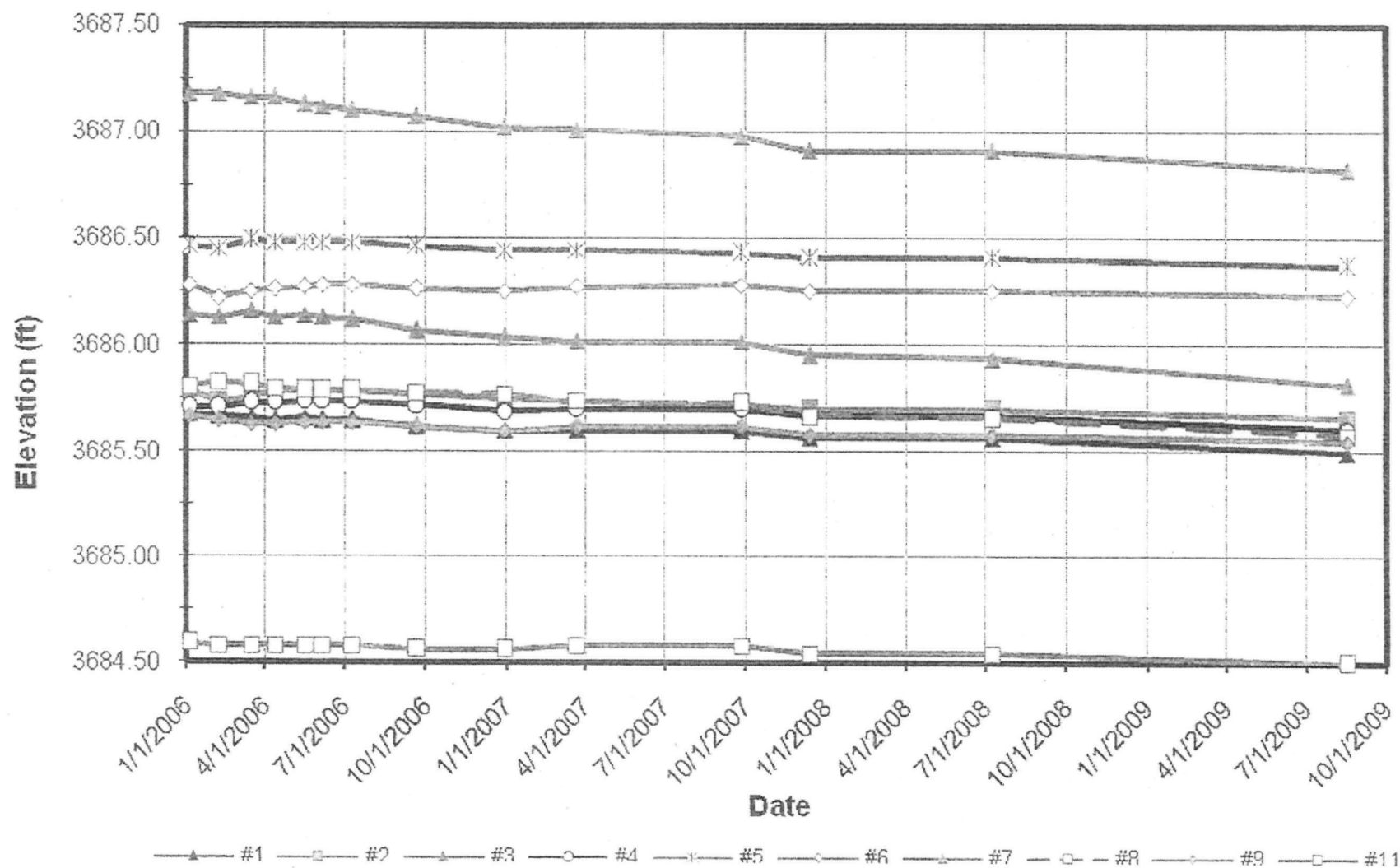
In summary the largest measured settlement is, as expected, near the center of the impoundment at -0.36 feet (monitor #7). Slightly greater settlement in and near the center of the impoundment is to be expected as significant quantities of fill were placed in this area during construction of the final cover system.

Survey data shows that the northern half of the impoundment has settled between 0.09 and 0.36 feet. The southern half of the impoundment has experienced very little settlement (0.05 to 0.12 feet). Greater settlement is expected in the northern half versus the southern half due to methods utilized to place the original cover system prior to final reclamation activities. According to Chris Gypton and Alan Wilson, placement of the original cover system started in the southwest corner. Additional cover materials were then dumped in that corner and pushed across the impoundment towards the northeast corner. The result of this placement method was that prior to final cover construction, the overall thickness of waste in the southern end of the impoundment was less than that in the northern end.

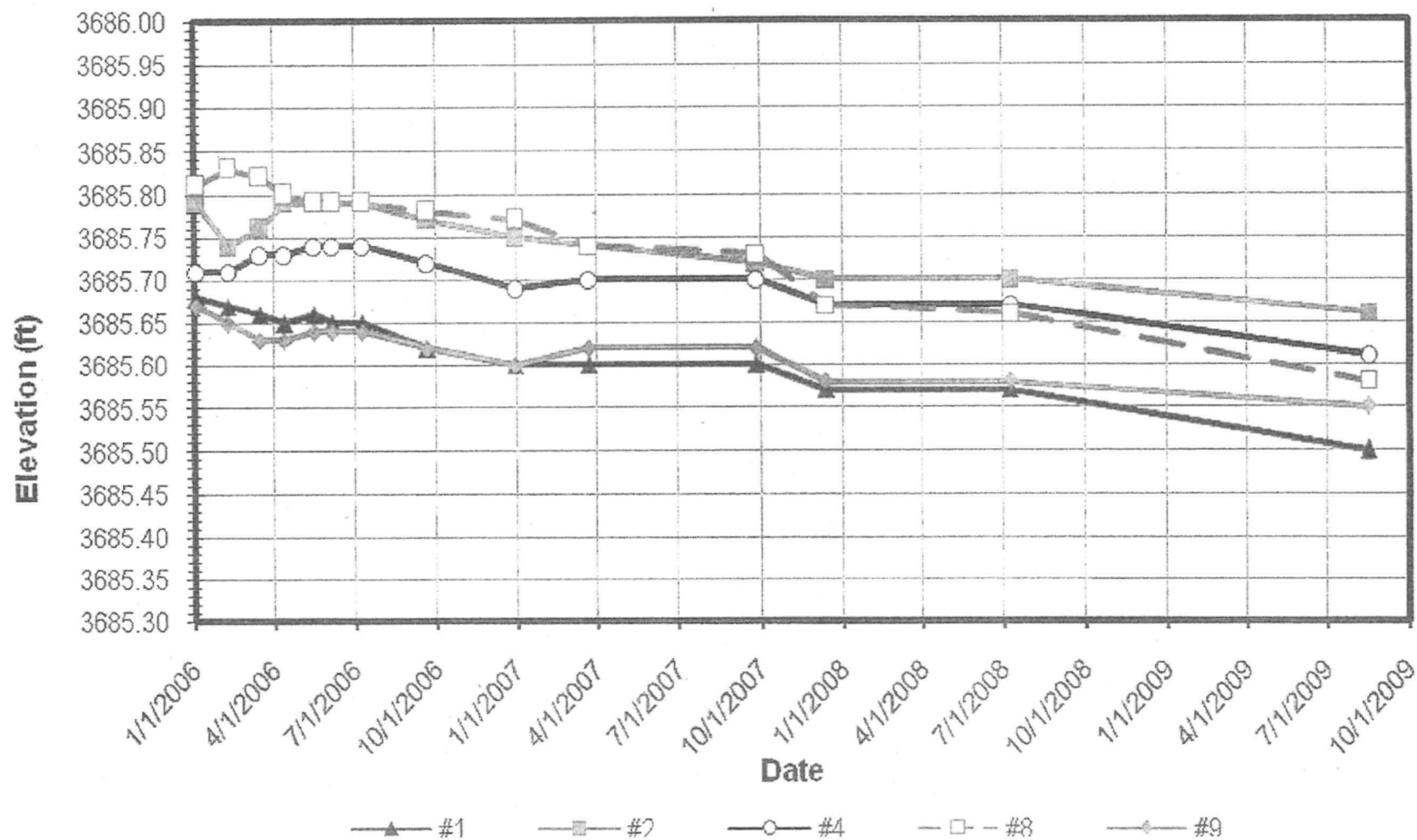
There continues to be no concerns to date with settlement. There are no low spots and no signs of ponding rain water. As expected with long-term consolidation, the data shows that settlement rates are slightly decreasing over time. Consolidation of waste materials and final reclamation cover materials appears to be very minimal and decreasing. Additionally, it is highly unlikely that any liquids are leaving the impoundment.

All elevation data provided by Alpha Engineering is presented graphically on the following pages. The first graph shows all monuments (except monitor #10 the baseline point) on a scale that allows all data to be compared. The next five graphs have expanded "Y" axes scales in order to more clearly show elevation changes, and for ease of comparison between graphs. A monument location map (provided by Alpha Engineering) is attached on the last page of this document. Included on this map are contours showing approximate total settlement of the top surface since installation of the monuments.

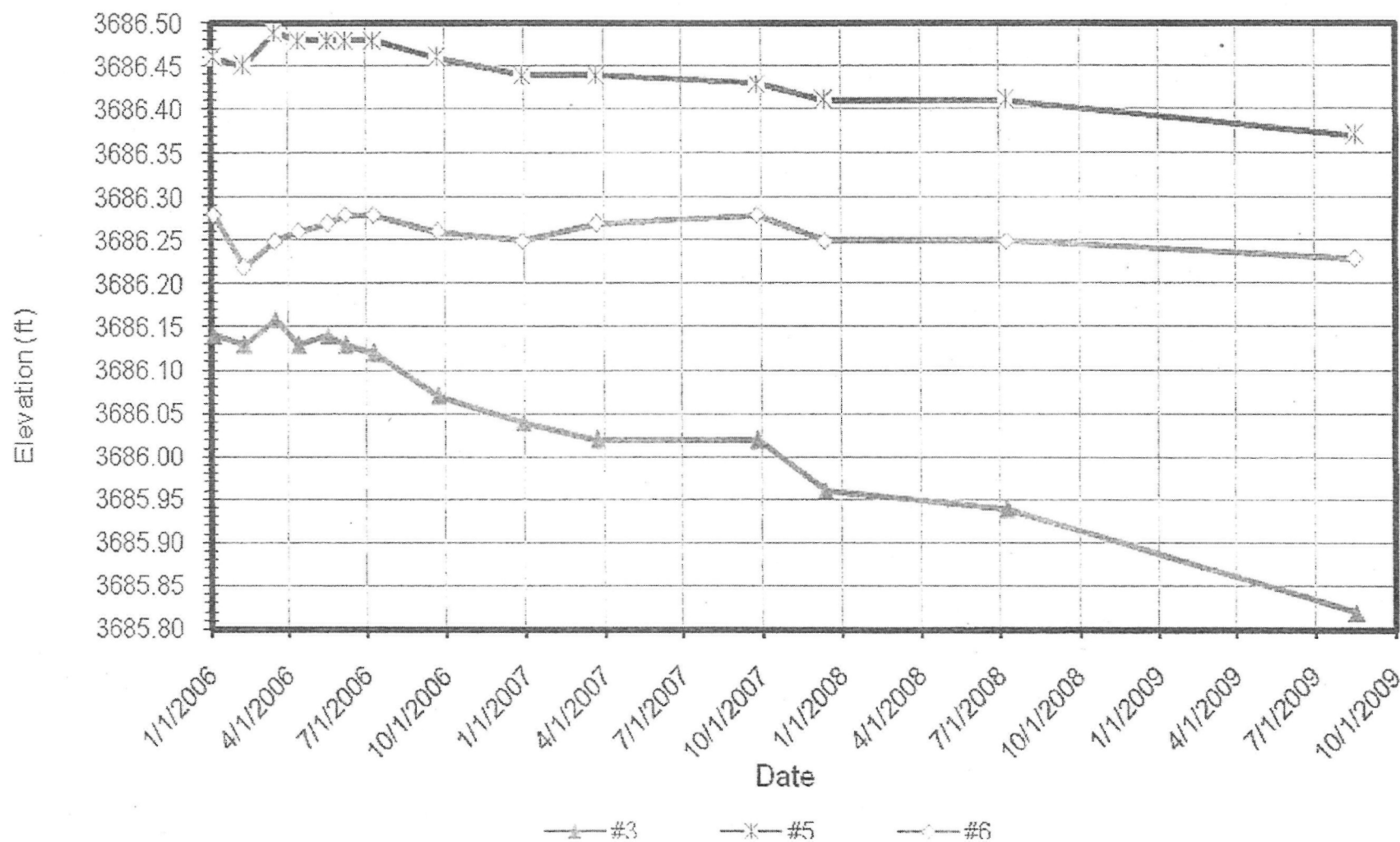
Based on data collected to date, MEI recommends that Hecla continue with their current plan and collect elevation data annually. Please contact me if you have any questions concerning this review.



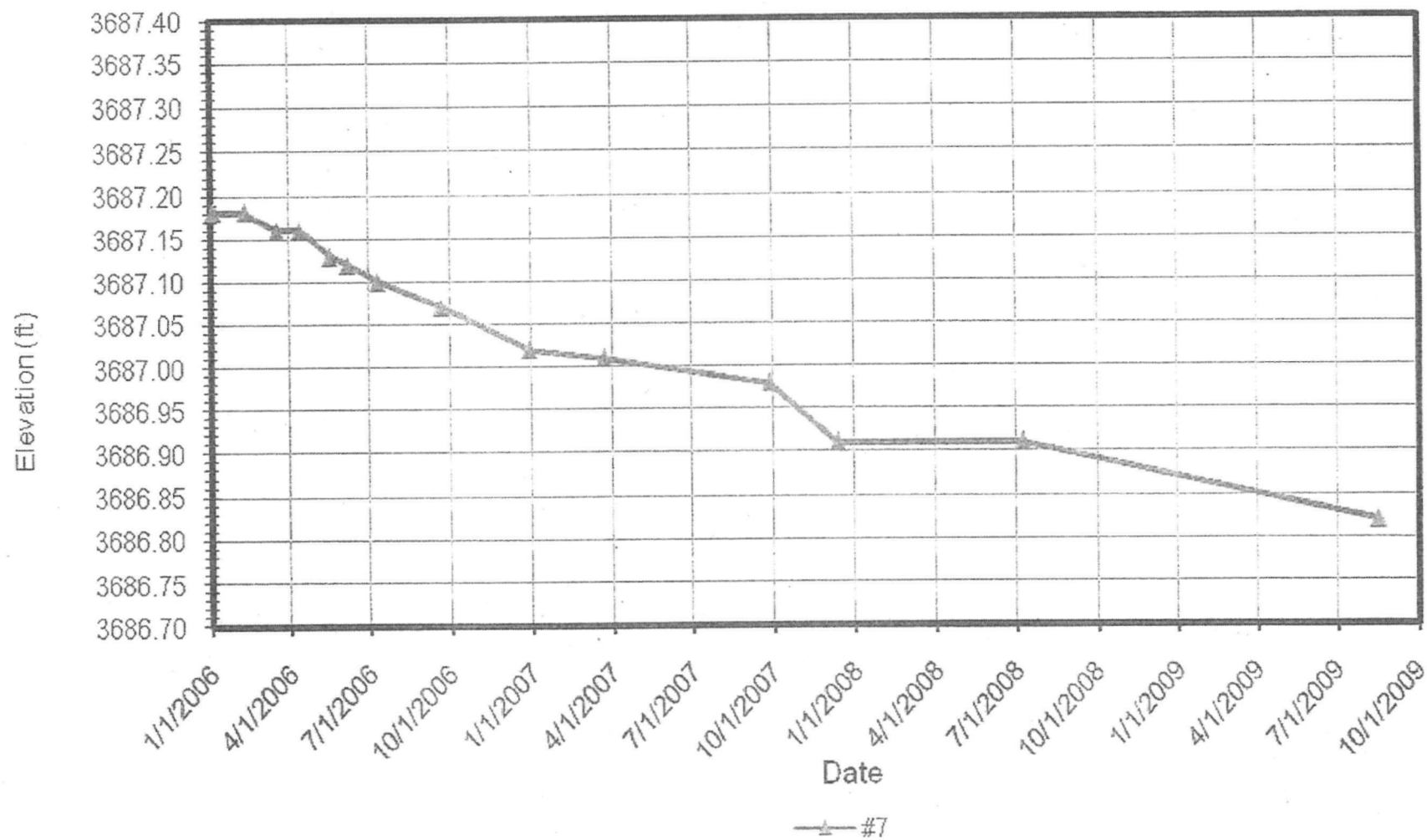
Apex Pond 2 - Settlement Monument Elevations



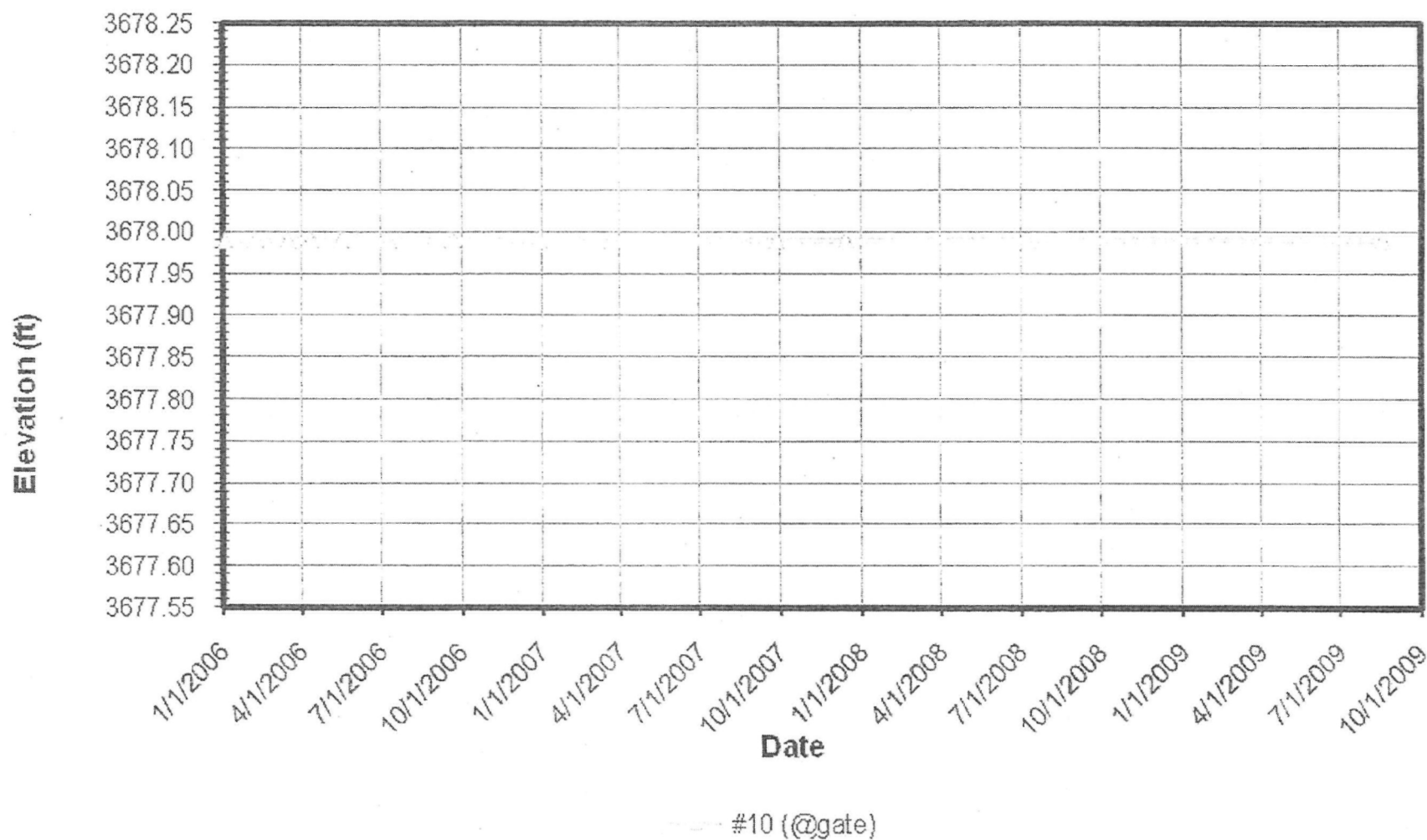
Apex Pond 2 - Settlement Monument Elevations



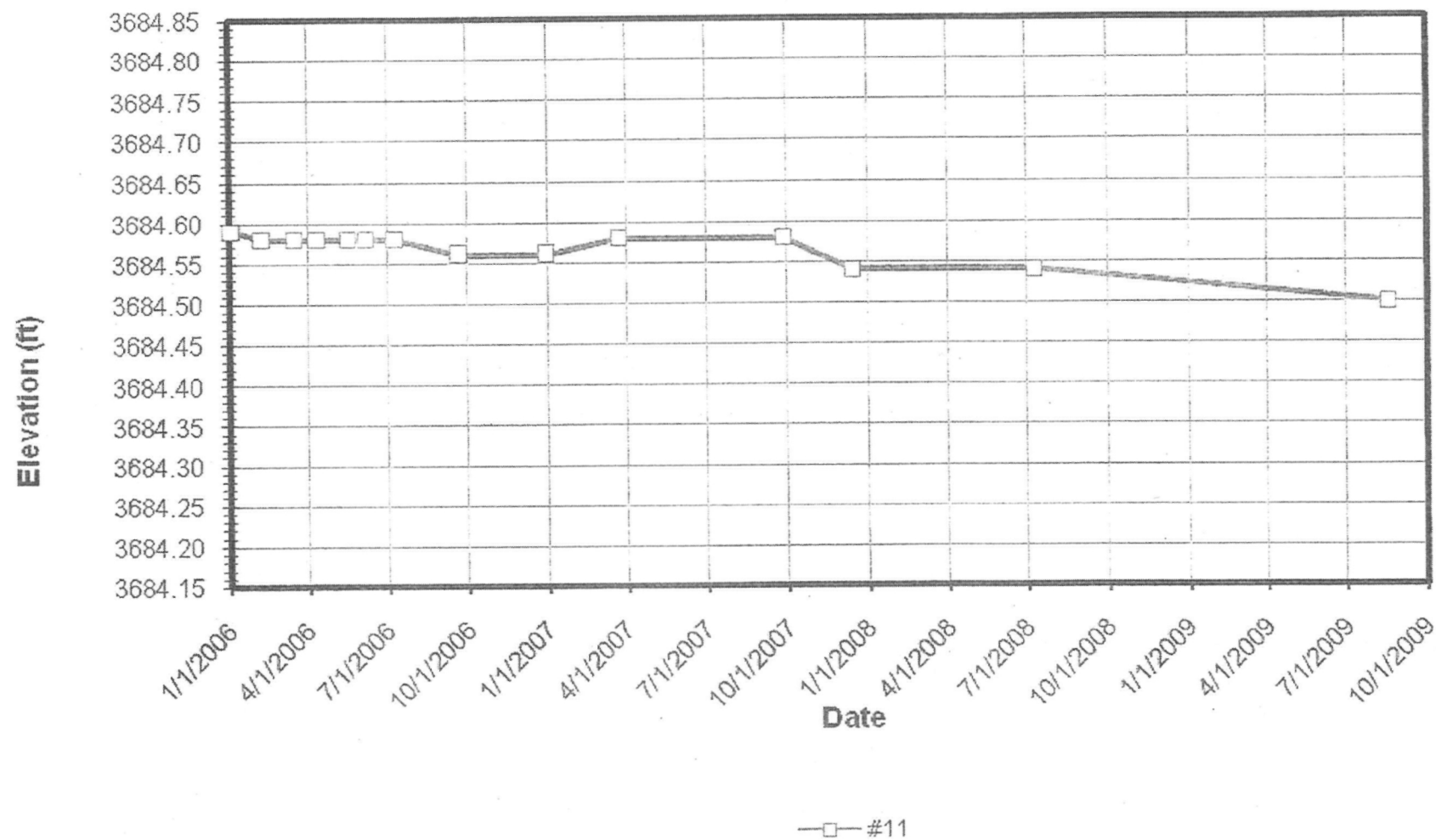
Apex Pond 2 - Settlement Monument Elevations

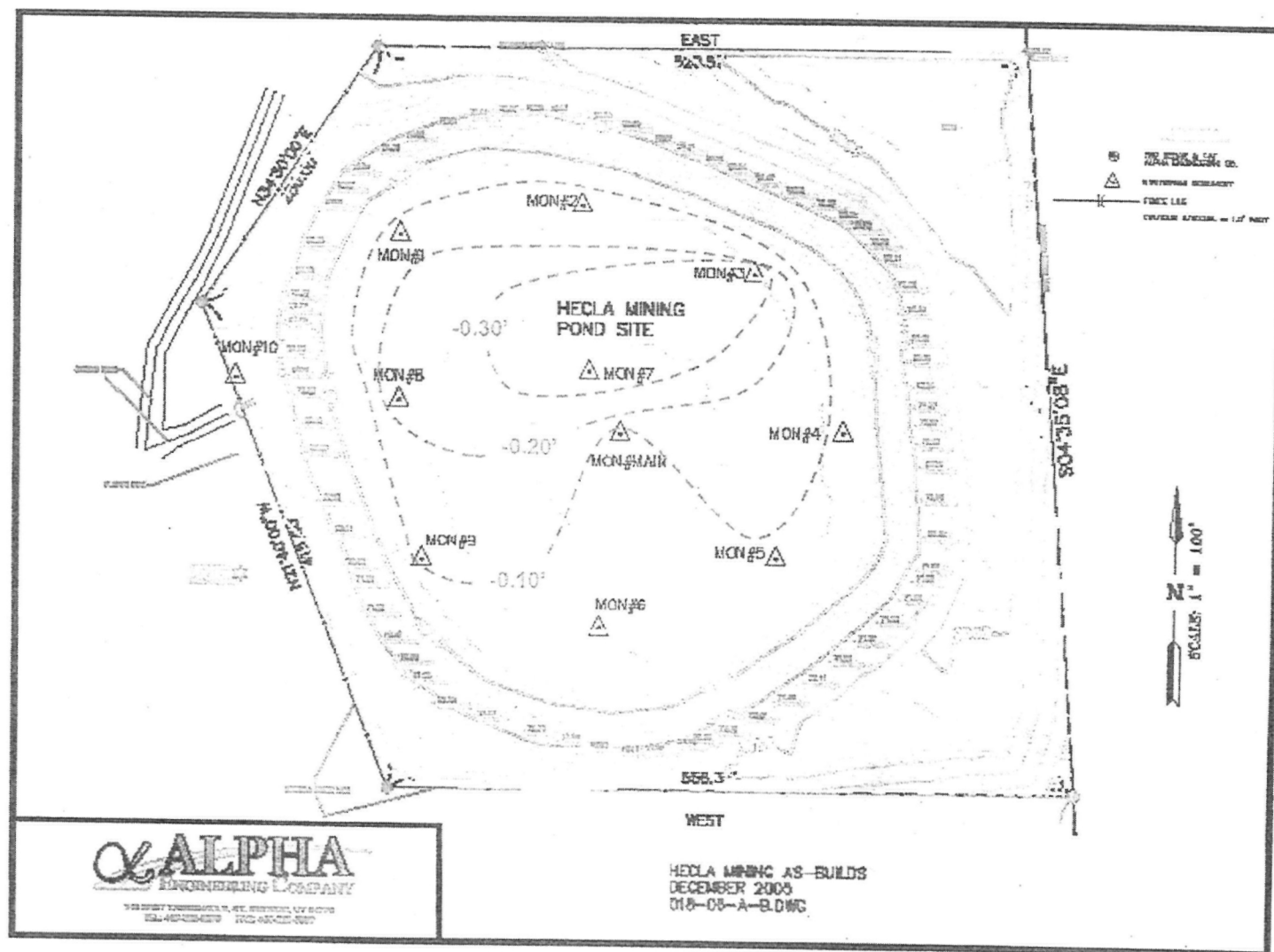


Apex Pond 2 - Settlement Monument Elevations



Apex Pond 2 - Settlement Monument Elevations





Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 9-30-09	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phases I through III (Completed February 2006)							
Phase I - Drain Excess Liquid From Tailings	189,200	72,700		67,928	0	67,928	
Phases II, IIA + IIB - Evaporate Excess Liquid	6,000	8,000		242,882	0	242,882	
Phase III - Regrading & Final Cover System	337,000	342,050		504,742	0	504,742	
Field Indirect Costs	164,500	213,568		378,517	0	378,517	Includes Jan + Feb 2006 long term monitoring costs
Hecla Costs	18,700	18,700	0	33,324	0	33,324	
Subtotal Phases I through III	715,400	655,018	0	1,227,393	0	1,227,393	
Long Term Monitoring (through FY 2010)							
Site Inspections			176	189,815	4,898	194,713	
Settlement Monitoring				8,775	1,650	10,425	
<u>Consultant Support:</u>							
Annual Geotechnical Engineer Inspections				2,495	18,100	20,595	Includes settlement monitoring data analysis
Vegetation Monitoring			0	0	20,000	20,000	Allowance for surveys in FY 2008 - 2010
Site Conditions Review - MEI			255	7,669	2,132	9,801	
Site Conditions Review - SVL Analytical			0	2,079		2,079	
Erosion Repair Review - MEI				2,927	573	3,500	
Revegetation Review - Bamberg					3,500	3,500	
<u>Maintenance:</u>							
Erosion Repair Allowance				21,941	7,500	29,441	Erosion repair conducted April 2008
Revegetation Allowance				9,912	10,000	19,912	Revegetation conducted April 2008
<u>Hecla Project Management Costs:</u>							
Labor			0	2,266	7,909	10,175	
Travel expenses			0	0	1,312	1,312	
Subtotal Long Term Monitoring	0	0	431	247,879	77,574	325,453	
Total Pond 2 Final Closure	715,400	655,018	431	1,475,272	77,574	1,552,846	



Fw: Apex
Eric Johnson to: Amy Swanson

12/03/2009 11:15 AM

----- Forwarded by Eric Johnson/R8/USEPA/US on 12/03/2009 11:15 AM -----

From: Paul Glader <pglader@hecla-mining.com>
To: Eric Johnson/R8/USEPA/US@EPA
Date: 11/23/2009 11:18 AM
Subject: Apex



October Monthly Report Apex Pond 2 - progress rpt complete, october 2009.pdf